W03168

0053632

Quanterra
Environmental Services

Quanterra Incorporated
13715 Rider Trail North
Earth City, Missouri 63045

314 298-8566 Telephone
314 298-8757 Fax

CASE NARRATIVE

Bechtel Hanford Incorporated
3350 George Washington Way
Richland, Washington 99352

June 22, 2000

Attention: Joan Kessner

RECEIVED
SEP 07 2000
EDMC

Project Number	:	36736
SAF	:	B00-027
SDG	:	W03168
Number of Samples	:	five (5)
Sample Matrix	:	solid
Data Deliverable	:	Summary
Date SDG Closed	:	June 6, 2000

II. Introduction

On June 6, 2000, five (5) "solid" samples were received by St. Louis for chemical analysis. The samples were received 2 degrees C. See the attached Sample Summary form for the Lab ID's and corresponding Client Ids.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits.

Analyses requested: Chromium – Total - 6010

Deviation from Request: None

IV. Definitions

The following codes are used to denote laboratory quality control samples and can be found in the data summary section of this report:

QCBLK- Quality Control Blank, Method Blank
QCLCS- Quality Control Laboratory Control Sample, Blank Spike
MS- Matrix Spike.
DUP- Matrix Duplicate
MSD- Matrix Spike Duplicate.

V. Comments

General: The term "Detection Limit" used in the analytical data reports refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

Quanterra

Please refer to the attached cross-reference table for the standard preparation methods used at Quanterra, St. Louis.

Chromium: A Laboratory Control Sample, Lab Control Sample Duplicate, Method Blank, Matrix Spike and Matrix Spike Duplicate were analyzed with each preparation batch per the protocol for this analysis.

The Matrix spike/Matrix spike duplicate recoveries are outside the control limits. The amount of Chromium found in the unspiked sample was greater than four times the spike amount added. The spike data was flagged with an "N" qualifier. The LCS/LCSD recoveries were acceptable.

I certify that this Summary is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Reviewed and approved:

Marti Ward
St. Louis Project Manager

SAMPLE SUMMARY

F0F060241

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DE8WP	001	B0Y2T7	05/04/00	09:00
DE8WV	002	B0Y2T8	05/04/00	09:20
DE8X0	003	B0Y2T9	05/04/00	09:28
DE8X1	004	B0Y2V0	05/04/00	09:38
DE8X3	005	B0Y2V1	05/04/00	09:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

METHODS SUMMARY

F0F060241

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-001
PROJECT #: 300-FF-1 WORK ORDER: DE8WP
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC"D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:00
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2T7
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00
METALS, TOTAL - Soils				
M6010_S CR				
(A-46-QO-01) DE8WP Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-002
PROJECT #: 300-FF-1 WORK ORDER: DE8WV
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC"D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:20
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2T8
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00
METALS, TOTAL - Soils				
M6010_S CR				
(A-46-QO-01) DE8WV Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-003
PROJECT #: 300-FF-1 WORK ORDER: DE8X0
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC"D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:28
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2T9
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00

METALS, TOTAL - Soils
M6010_S CR
(A-46-QO-01) DE8X0 Protocol: A QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-003-D
PROJECT #: 300-FF-1 WORK ORDER: DE8X0 MSD
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC"D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:28
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2T9
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00

METALS, TOTAL - Soils
M6010_S CR
(A-46-QO-01) DE8X0 Protocol: A QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-003-S
PROJECT #: 300-FF-1 WORK ORDER: DE8X0 MS
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC'D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:28
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2T9
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00
METALS, TOTAL - Soils				
M6010_S CR				
(A-46-QO-01) DE8X0 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-004
PROJECT #: 300-FF-1 WORK ORDER: DE8X1
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC'D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:38
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2V0
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00
METALS, TOTAL - Soils				
M6010_S CR				
(A-46-QO-01) DE8X1 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 6/06/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 16:05:16
STL St. Louis User Id.: WILSONS

CLIENT: 127642 BECHTEL HANFORD, INC. QUOTE/SAR #: 36736
PROJECT MANAGER: MARTI WARD LAB ID: F-0F060241-005
PROJECT #: 300-FF-1 WORK ORDER: DE8X3
REPORT TO: Bechtel Hanford, Inc. RECEIVING DATE: 6/06/00
P.O. NUMBER: MRC-SBB-A-19981 SAMPLING DATE: 5/04/00
SITE: B00-026 ANALYTICAL DUE DATE: 6/20/00N
AMOUNT REC'D: 60G REPORT DUE DATE: 6/21/00
STORAGE LOC: S12F PRIORITY: 14
LOT COMMENTS: SAMPLING TIME: 9:45
MATRIX: SOLID RECEIVING TIME: 10:10
SAMPLE ID: B0Y2V1
QC PACKAGE: Special Report - see checklist SDG# : W03168
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B)	06	6/06/00	0/00/00	10/31/00

METALS, TOTAL - Soils
M6010_S CR
(A-46-QO-01) DE8X3 Protocol: A QC Program: STANDARD TEST SET

LOT #F0F060241

Q-27038 cur 749 temp. 2°

STL St. Louis

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		B00-027-07	Page 1 of 2
Collector: Fahlberg	Company Contact: J Adler	Telephone No.: 373-4316	Project Coordinator: TRENT, SJ	Price Code: 9L; Data Turnaround: 21 Days
Project Designation: 105F & 105DR ISS Project - Other Solid	Sampling Location: 105F		SAF No.: B00-027	Air Quality ☐
Ice Chest No.: ERC-99-018	Field Logbook No.: EL 1381-3	COA: R105F2280C	Method of Shipment: Hand Delivered	
Shipped To: Quanterra Incorporated	Offsite Property No.		Bill of Lading/Air Bill No.: 004012714 613	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

SDG W03168

SAMPLE ANALYSIS Due 5.25 JOE040206

Sample No.	Matrix *	Sample Date	Sample Time	Preservation	None	Cool 4C								
				Type of Container	aG	aG								
				No. of Container(s)	1	1								
				Volume	20mL	60mL								
				Activity Scan		7196_CR6: Hexavalent Chromium (1)								
B0Y2T7 DCQLC	Other Solid	5-4-00	0900		X	X	1x2oz. GLASS				100 % full			
B0Y2T8 DCQLP	Other Solid	5-4-00	0920		X	X	↓				↓			
B0Y2T9 DCQLT	Other Solid	5-4-00	0928		X	X								
B0Y2V0 DCQLW	Other Solid	5-4-00	0938		X	X								
B0Y2V1 DCQM2	Other Solid	5-4-00	0945		X	X								

CHAIN OF POSSESSION	Sign/Print Names	Date/Time	Received By	Date/Time
Relinquished By	[illegible]	5-4-00 1200	[illegible]	5-4-01 1200
Relinquished By	Karen Rehfeldt-Lucy	6-5-00 1600	[illegible] STL	6-6-00 1010
Relinquished By			Received By	
Relinquished By			Received By	
Relinquished By			Received By	
Relinquished By			Received By	

SPECIAL INSTRUCTIONS

Total Chromium requested by client 6/2/00 for a 15 day TAT.

Method 6.6.00

Matrix *: S=Soil; SE=Sediment; SO=Solid; S=Sludge; W=Water; O=Oil; A=Air; DS=Drum Solids; DL=Drum Liquids; T=Tissue; WI=Wipe; L=Liquid; V=Vegetation; X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

BHI-EE-011 (10/99)

ERC Radiological Counting Facility Analysis Report

RCF Number RCF6959 1/1 cc: Bill Jarvis Sample Date & Time 12/29/99 0952

Project ID: 105-F SAF Number: B00-013 Date Analyzed 12/30/99 9:08:

Sample ID: B0XBF6

Gamma Energy Analysis

Nuclide		Activity (pCi/g)		Error (pCi/g)	MDC (pCi/g)
K-40	<	1.7E+02			1.7E+02
Co-60	<	1.8E+01			1.8E+01
Cs-137	<	1.8E+01			1.8E+01
Eu-152	<	4.7E+01			4.7E+01
Eu-154	<	4.8E+01			4.8E+01
Eu-155	<	8.0E+01			8.0E+01
Th-232D	<	4.7E+01			4.7E+01
U-235	<	1.6E+02			1.6E+02
U-238	<	3.3E+03			3.3E+03
U-238D		9.4E+01	+/-	4.3E+01	4.9E+01
Am-241	<	4.7E+01			4.7E+01

BOX 60 61 62 → BOX 65 BOX 66 63 64

results for samples 001 → 007 ~~002~~ FOA06175

Total GEA (pCi/g)	9.4E+01	+/-	4.3E+01

	Activity (pCi/g)		Error (pCi/g)
Gross Alpha**	7.6E-01	+/-	6.0E-01
Gross Beta	1.0E+01	+/-	1.2E+00

Alpha MDC (pCi/g)
4.3E-01
Beta MDC (pCi/g)
5.6E+00

Definitions:

All errors reported at 2 standard deviations.
N/R = no result or analysis not requested. <MDC = Less than detection limit.
All GEA results reported as "<" list the Minimum Detectable Concentration (MDC) value for that radionuclide.
Rounding error may result in the reported total GEA activity differing from the sum of the > MDC GEA values in the second significant digit.

For soils and natural samples, the following applies:

The analysis of U-238 is based on the activity of Pa-234m.
The analysis of Np-237 is based on the activity of Pa-233.
U-238dau is the activity of Pb-214 and Bi-214, short lived daughter products of U-238. Equilibrium between parent and daughter products probably does not exist in disturbed materials.
Th-232dau is the activity of Ac-228, Pb-212, and Tl-208, short lived daughter products of Th-232. Equilibrium between parent and daughter products may not exist in disturbed materials.
Other samples, not containing natural materials, may have inapplicable results for the Th, U, transuranics and daughter products. The results must then be balanced for the gross alpha analysis.
**The gross alpha results are not corrected for mass absorption
No peaks for this radionuclide were visible above background in the spectrum. The result was reported as less than MDC.

Analyst T. J. Smith 12/30/99

Report To D. St John Fax 372-9487

Report Printed: Thursday, December 30, 1999

000036

Figure 1. Sample Check-in List

Date/Time Received: 5-4-00 1200 SDG#: W03168

Work Order Number: 301040206 SAF#: B00-027

Shipping Container ID: ERC 99 018 Chain of Custody #: B00-027-07

1. Outermost shipping container damaged? Yes [ ] No [✓]
2. Custody Seals on shipping container intact? Yes [✓] No [ ]
3. Custody Seals dated and signed? Yes [✓] No [ ]
4. *Chain-of-Custody record present?* Yes [✓] No [ ]
5. Chain-of-Custody includes the following information:
   - *Client name* Yes [✓] No [ ]
   - Project name or number Yes [✓] No [ ]
   - Sample date/time for each sample Yes [✓] No [ ]
   - Container types, sizes and number of containers Yes [✓] No [ ]
   - Short description of sample, i.e., matrix Yes [✓] No [ ]
   - Analyses requested Yes [✓] No [ ]
   - Preservation used or "none" or N/A if not applicable Yes [✓] No [ ]
   - Date and time of relinquish and receipt Yes [✓] No [ ]
   - Signatures of those persons relinquishing and receiving Yes [✓] No [ ]
6. Sample numbers on chain of custody match those on sample containers? 10 Yes [✓] No [ ]
7. Collection date and date of laboratory receipt are within project specific holding time requirements? Yes [✓] No [ ]
8. Cooler temperature: 4°
9. Vermiculite/packing materials is: Wet [✓] Dry [ ]

10. Samples have: ✓ tape ____ hazard labels
    ✓ custody seals ✓ appropriate sample labels

11. Samples are: ✓ in good condition ____ leaking
    ____ broken ____ have air bubbles

12. Were any anomalies identified in sample receipt? Yes [ ] No [ ]
13. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [signature] Date: 5-4-00

Telephone/Fax/E:mailed to: _____ On _____ By _____

(R) 5/9/00

CLIENT CODE ID	MATRIX	RECEIVED	DETECTOR	ACQ DATE	SAMPLE	MINUTES	CNTS A	NET CPM A	CNTS B	NET CPM B
BIII B0Y3V9DCPE3		5/4/2000 1:19:00 PM	QUAD22C	5/8/2000 4:39:26 PM	B0Y3V9DCPE3	30	3	0.005	60	0.94833333
DCPE3	LIQUID		Bkg:	5/5/2000 2:44:27 AM	BKG	600	57	0.095	631	1.05166667

Anl Date: 5/9/00	Tot Sa, Alq: 5.00E-01	, 1.00E+01	Alp;	(Dpm/	-1.93E-02	(uCi/	-4.36E-07	(pCi/	-8.71E-01	+ 2.1E+01	CAT	5.0E-01	Lab
Ppt mg: 3.7	Units: L	, ml	Bet;	Alq):	1.78E+00	Sa):	4.01E-05	Lig):	8.01E+01	+ 2.2E+01	I	6.2E-01	Alq Lig

STL
Committed to *Your* Success

000749

Lot No.: F0F060241
W03168

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: Bechtel-Hanford
Date: 6.6.00 Time: 830
Quote No: 36736 Initiated by: [signature]
Shipper/No: Airborne 004012714613 RFA/COC Numbers: B00-027-07

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☑ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below)

☑ No variances were noted during sample receipt.
☐ Cooler Temperature Upon Receipt in °C: 2°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: _____

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____
☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is". _____
☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 6.6.00
Project Management Review: MWard Date: 6.7.00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

SL-ADMIN-0004, Revised 03/06/00

METALS

BECHTEL HANFORD, INC.

Client Sample ID: B0Y2T7

TOTAL Metals

Lot-Sample #...: F0F060241-001 **Matrix.....: SOLID**
Date Sampled...: 05/04/00 **Date Received..: 06/06/00**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0166143						
Chromium	**636**	**1.0**	**mg/kg**	**SW846 6010B**	**06/14-06/15/00**	**DE8WP101**
		Dilution Factor: 1		MDL.....: 0.30		

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F0F060241 **Matrix.....:** SOLID
Date Sampled...: 05/04/00 **Date Received..:** 06/06/00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0F060241-003 **Prep Batch #...:** 0166143									
Chromium									
	375	20.0	406 N	mg/kg	154		SW846 6010B	06/14-06/15/00	DE8X0102
	375	20.0	369 N,*	mg/kg	0.0	200	SW846 6010B	06/14-06/15/00	DE8X0103

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

BECHTEL HANFORD, INC.

Client Sample ID: B0Y2T8

TOTAL Metals

Lot-Sample #...: F0F060241-002 **Matrix.....: SOLID**
Date Sampled...: 05/04/00 **Date Received..: 06/06/00**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0166143						
Chromium	**711**	**1.0**	**mg/kg**	**SW846 6010B**	**06/14-06/15/00**	**DE8WV101**
		Dilution Factor: 1		MDL.....: 0.30		

BECHTEL HANFORD, INC.

Client Sample ID: B0Y2T9

TOTAL Metals

Lot-Sample #...: F0F060241-003 **Matrix.....: SOLID**
Date Sampled...: 05/04/00 **Date Received..: 06/06/00**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0166143						
Chromium	375	1.0	mg/kg	SW846 6010B	06/14-06/15/00	DE8X0101
		Dilution Factor: 1		MDL.....: 0.30		

BECHTEL HANFORD, INC.

Client Sample ID: B0Y2V0

TOTAL Metals

Lot-Sample #...: F0F060241-004 **Matrix.....: SOLID**
Date Sampled...: 05/04/00 **Date Received..: 06/06/00**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0166143						
Chromium	**116**	**1.0**	**mg/kg**	**SW846 6010B**	**06/14-06/15/00**	**DE8X1101**
		Dilution Factor: 1		MDL.....: 0.30		

BECHTEL HANFORD, INC.

Client Sample ID: B0Y2V1

TOTAL Metals

Lot-Sample #...: F0F060241-005 **Matrix.....: SOLID**
Date Sampled...: 05/04/00 **Date Received..: 06/06/00**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0166143						
Chromium	**22.6**	**1.0**	**mg/kg**	**SW846 6010B**	**06/14-06/15/00**	**DR8X3101**
		Dilution Factor: 1		**MDL.....: 0.30**		

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: F0F060241 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chromium	99.4	102	mg/kg	102		SW846 6010B	06/14-06/15/00	0166143
	99.4	93.3	mg/kg	94	8.6	SW846 6010B	06/14-06/15/00	0166143

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SDR # B00-109
Revision #: 0
Date Initiated: 06/21/00

SAMPLE DISPOSITION RECORD

SAF: B00-027
OU: NA
Project ID: 105F/105DR
Task ID: 1
Sampling Event: 105F & 105DR ISS Project

Laboratory: Severn Trent Inc, (Quanterra)

Task Manager: Morton, MR

Sampling Information:
Number of Samples: 5
ID Numbers: B0Y2T8, B0Y2T7, B0Y2T9, B0Y2V1, and B0Y2V0
Matrix: other solid
Collection Date: 5/04/00

Issue Background:

Class: ☐ Project Data Use ☒ General Laboratory Direction ☐ Validation Direction ☐ Sample Management Direction

Type: 1) Addition of analysis.

Description: Total chromium by ICP was requested after samples had been delivered to the laboratory.

Disposition:

Description: Laboratory was directed to add total chromium by ICP via telecom.

Justification: Total chromium content is required by the project.

Approval Signatures:

S. J. Trent BWSha (for SJ Trent) 6/21/00
Project Coordinator (Print/Sign Name) Date

M.R. Morton
Task Manager (Print/Sign Name) Date